

WHAT IS CLAIMED IS:

1. A method of delivering an implant through a vascular space to a vascular site in a body, comprising:

5 providing a guide, a first member having a distal end and a proximal end and defining a first cavity, and a second member having a distal end and a proximal end and defining a second cavity, the second member being insertable within the first cavity;

10 advancing the distal ends of the first and second members along the guide and through the vascular space to the vascular site;

removing the second member and the guide from the first cavity; and

15 inserting the implant through the first cavity and to the vascular site.

2. The method of claim 1, the second member reducing radial movement of the first member relative to the guide.

20 3. The method of claim 1, the guide being confined to the second cavity when the first and second members are inserted through the vascular space.

25 4. The method of claim 1, before inserting the implant, further comprising re-inserting the guide through the first cavity, the implant being inserted along the guide and through the vascular space to the vascular site.

5. The method of claim 1, further comprising removing the first member from the vascular space.

6. The method of claim 1, inserting the distal ends of the first and second members further comprising inserting generally aligned distal ends of the first and second members along the guide and through the vascular space to the vascular site.

7. The method of claim 1, providing the first member further comprising providing a first annular catheter defining the first cavity.

8. The method of claim 1, providing the second member further comprising providing a second annular catheter defining the second cavity.

9. The method of claim 1, inserting the implant further comprising inserting a vaso-occlusive implant.

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10. A method of delivering a first implant through a vascular space to a vascular site in a body, comprising:
providing a guide, a first member having a distal end and a proximal end and defining a first cavity, and a second member having a distal end and a proximal end and defining a second cavity, the second member being insertable within the first cavity;

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advancing the distal ends of the first and second members along the guide and through the vascular space to

the vascular site, thereby advancing the first implant to the vascular site.

11. The method of claim 10, the first implant being
5 advanced by the distal end of the first member.

12. The method of claim 10, the first implant being advanced by the distal end of the second member.

10 13. The method of claim 10, the first implant being advanced by the distal ends of the first and second members.

14. The method of claim 10, further comprising removing
15 the first member, the second member and the guide from the vascular space.

15. The method of claim 10, further comprising inserting a second implant through the second cavity of the second
20 member into the vascular site.

16. The method of claim 15, the second implant being contained within the vascular site by the first implant.

25 17. The method of claim 15, inserting the second implant further comprising inserting a vaso-occlusive implant into the vascular site.

18. The method of claim 10, the vascular site comprising an aneurysm, the first implant being placed within a neck of the aneurysm.

5 19. The method of claim 10, the second member reducing radial movement of the first member relative to the guide.

20. The method of claim 10, the guide being confined to the second cavity when the first and second members are
10 inserted through the vascular space.

21. The method of claim 10, inserting the distal ends of the first and second members further comprising inserting generally aligned distal ends of the first and second
15 members along the guide and through the vascular space to the vascular site.

~~20~~ 21. The method of claim 10, providing the first member further comprising providing a first annular catheter
20 defining the first cavity.

~~22~~ 22. The method of claim 10, providing the second member further comprising providing a second annular catheter
defining the second cavity.

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A system for delivering an implant through a vascular space to a vascular site in a body, comprising:

a guide;

a first member having a distal end and a proximal end

5 and defining a first cavity;

a second member having a distal end and a proximal end and defining a second cavity, the second member being insertable within the first cavity;

10 the guide being inserted through the vascular space to the vascular site, the distal ends of the first and second members being advanced along the guide and through the vascular space to the vascular site, the second member and the guide being removed from the first cavity, and the
15 implant being inserted through the first cavity and to the vascular site.

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The system of claim 23, the implant comprising a vaso-occlusive implant.

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20 The system of claim 23, the vaso-occlusive implant comprising a coil.

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The system of claim 23, the implant comprising a stent.

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The system of claim 23, the implant comprising a filter.

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30 The system of claim 23, the guide comprising a wire guide.

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~~29~~. The system of claim 23, the first member comprising a first annular catheter defining the first cavity.

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~~30~~. The system of claim 29, the first annular catheter having outer diameter of about 0.66mm to about 1.3mm.

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~~31~~. The system of claim 29, the first cavity having a diameter of about 0.5mm to about 1.25mm.

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~~32~~. The system of claim 23, the second member comprising a second annular catheter defining the second cavity.

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~~33~~. The system of claim 32, the second annular catheter
15 having an outer diameter of about 0.45mm to about 1.20mm.

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~~34~~. The system of claim 32, the second cavity having a diameter of about 0.35mm to about 1.0mm.

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~~35~~. The system of claim 23, the distal ends of the first and second members being generally aligned when they are advanced along the guide and through the vascular space.

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~~36~~. The system of claim 23, the vascular site comprising
25 an aneurysm.

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~~37~~. The system of claim 23, the vascular site comprising a tumor.

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A system for delivering a first implant through a vascular space to a vascular site in a body, comprising:

a guide;

a first member having a distal end and a proximal end

5 and defining a first cavity;

a second member having a distal end and a proximal end and defining a second cavity, the second member being insertable within the first cavity;

10 the distal ends of the first and second members being advanced along the guide and through the vascular space to the vascular site, thereby advancing the first implant to the vascular site.

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15 39. The system of claim 38, the first implant comprising a containment implant.

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40. The system of claim 38, the first implant being advanced by the distal end of the first member.

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20 41. The system of claim 38, the first implant being advanced by the distal end of the second member.

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25 42. The system of claim 38, the first implant being advanced by the distal ends of the first and second members.

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30 43. The system of claim 38, the first member, the second member and the guide being removed from the vascular space after the first implant is delivered to the vascular site.

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44. The system of claim 38, further comprising a second implant, the second implant being inserted through the second cavity of the second member and into the vascular site.

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45. The system of claim 44, the first implant containing the second implant within the vascular site.

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46. The system of claim 44, the second implant comprising
10 inserting a vaso-occlusive implant.

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47. The system of claim 46, the vaso-occlusive implant comprising a vaso-occlusive coil.

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48. The system of claim 38, the guide comprising a wire
15 guide.

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49. The system of claim 38, the first member comprising a first annular catheter defining the first cavity.

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50. The system of claim 49, the first annular catheter having outer diameter of about 0.66mm to about 1.3mm.

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51. The system of claim 49, the first cavity having a
25 diameter of about 0.5mm to about 1.25mm.

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52. The system of claim 38, the second member comprising a second annular catheter defining the second cavity.

~~53~~⁵⁴. The system of claim 52, the second annular catheter having an outer diameter of about 0.45mm to about 1.20mm.

~~54~~⁵⁵. The system of claim 52, the second cavity having a diameter of about 0.35mm to about 1.0mm.

~~55~~⁵⁶. The system of claim 38, the distal ends of the first and second members being generally aligned when they are advanced along the guide and through the vascular space.

10 ~~56~~⁵⁷. The system of claim 38, the vascular site comprising an aneurysm.

~~57~~⁵⁸. The system of claim 38, the vascular site comprising a tumor.